

## Member Agencies:

*American Bureau of Shipping  
 Defence Research Establishment Atlantic  
 Maritime Administration  
 Military Sealift Command  
 Naval Sea Systems Command  
 Transport Canada  
 United States Coast Guard*



**Ship  
 Structure  
 Committee**

## Address Correspondence to:

Executive Director  
 Ship Structure Committee  
 U.S. Coast Guard (G-MSE/SSC)  
 2100 Second Street, S.W.  
 Washington, D.C. 20593-0001  
 Ph: (202) 267-0003  
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An Interagency Advisory Committee

5420/SSC  
 February 27, 1997

## To Whom it May Concern:

The Ship Structure Committee (SSC) is pleased to announce the invitation for applications for its 1997-1999 student member position. This program was started in 1993 to foster continued studies in ship structures. The SSC provides funds for travel and per diem, under federal travel limitations, to the student for travel to SSC planning and project meetings. The student is selected for a one to two year term. Although you may be familiar with the SSC, I have enclosed an article from a 1992 issue of the ABS publication, SURVEYOR, for you to circulate among any interested students. Details of the program are contained in the enclosure.

The university is requested to support the program by accommodating the student's absences, assisting in his/her duties and, where possible providing funding assistance. The level of support offered by the university will be considered in the selection process.

The closing date for 1997-1999 SSC Student Member applications is May 1, 1997. The selected student and sponsoring professor will be notified by June 30, 1997. The first SSC meeting the student will attend is held in Washington, DC, near the end of September. I urge you to acquaint your faculty and students with the details of this program.

Sincerely,

Thomas C. Miller  
 Lieutenant, U.S. Coast Guard  
 Executive Director,  
 Ship Structure Committee

## SHIP STRUCTURE COMMITTEE STUDENT MEMBER

The Ship Structure Committee (SSC) is an interagency committee consisting of the American Bureau of Shipping, Canadian Defence Research Establishment Atlantic, U.S. Maritime Administration, U.S. Military Sealift Command, U.S. Naval Sea Systems Command, Transport Canada, and the U.S. Coast Guard. Its primary mission is to further the state of the art in ship structure design, construction, maintenance and operation. The SSC evolved out of the board of investigation that looked into the cracking of the Liberty Ships during World War II. Since its inception in 1946, the SSC has sponsored nearly 400 structure related research projects, distributed over 390 project reports worldwide at no cost, funded annual scholarship programs for students, and organized numerous technical symposiums related to ship structures.

In order to further encourage students studying ship structural design, the committee has decided to sponsor a student as a nonvoting member. Membership is intended for undergraduate students starting their junior year. They may continue as a member for two years or until graduation, whichever is earlier. The student will be funded by the SSC to attend 4 meetings of the SSC held each year:

<u>Meeting</u>	<u>Month</u>	<u>Location</u>
Planning Meeting	September	National Academy of Science, Washington, DC
Fall Meeting	November	ABS, New York, NY
SSSC Field Trip	April	Various Locations ( '96-Seattle, '97-New Orleans)
Spring Meeting	June	USCG HQ, Washington, DC

While attending these meetings the student may be given a letter of introduction from the SSC and be encouraged to visit naval architecture firms, classification societies, and government agencies in the area to further broaden their experience. In addition, the student will become a member of one Project Technical Committee (PTC) each year. Project selection will be made jointly by the student and the SSC Student Liaison. The SSC will fund the student to attend 4-6 PTC meetings involving selection of the project researcher and then project oversight. The meetings are generally held in Washington and at the researcher's facilities. This provides a first hand opportunity to see research in progress in the industry.

The student will be expected to attend the scheduled meetings. Some conflicts are expected, but continuation for the second year will greatly depend on the student's level of participation during the previous year. Each year at the Spring Meeting the student will provide a short delivery on his/her accomplishments during the year. It is hoped that the student's insight into our activities may assist the SSC in planning future research. The student is also requested to prepare an informal newsletter twice a year to the other universities on the activities observed (the SSC will arrange printing and distribution of the newsletter).

To apply for this student membership, submit the attached form to be received prior to 1 May, 1997.

## Application for Student Member Position in Ship Structure Committee

(Please type or print neatly)

Name \_\_\_\_\_ School \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

City \_\_\_\_\_ State/Province \_\_\_\_\_

Country \_\_\_\_\_ Zip/Postal Code \_\_\_\_\_

Junior year 1997-98? \_\_\_\_\_ Graduating Year \_\_\_\_\_

Major \_\_\_\_\_ Specialization \_\_\_\_\_

Credits Completed \_\_\_\_\_ Grade Point Average \_\_\_\_\_

1. Attach a brief statement (no more than one page) on why you are interested in the field of ship structures and what you hope to attain by being a member of the committee.

2. Attach brief resume and academic record.

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Endorsement - *to be completed by student's academic advisor or department head.*

Name \_\_\_\_\_ Position \_\_\_\_\_

Phone No. \_\_\_\_\_ Fax No. \_\_\_\_\_

Number of students registered in Naval Architecture, Marine Engineering, Ocean Engineering or related degree programs \_\_\_\_\_

I certify that to the best of my knowledge the information submitted by the applicant above is correct. I endorse this application for Student Member of the SSC and will support the student in completion of the student member duties.

Signature \_\_\_\_\_

*(A separate endorsement from the university on the student's performance and any additional support the university can give towards this would be beneficial.)*

Send completed application to:

Executive Director  
Ship Structure Committee  
U.S. Coast Guard (G-MSE/SSC)  
2100 Second Street, SW  
Washington, DC 20593-0001

5420/SSC  
September 13, 1993

Mr. Jason E. Miller  
Massachusetts Institute of Technology  
526 Beacon St.  
Boston, MA 02215

Dear Sir:

I am pleased to inform you of your selection for the position of Student Member in the Ship Structure Committee (SSC). Your application was well received by the committee and we look forward to your active participation.

The first order of business for you will be the annual Joint Meeting between the SSC and the Committee on Marine Structures of the National Academy of Sciences on September 11. It will give you a chance to meet the committee and to hear about the conclusions of several of our recent projects. At that point we can plan your program and select the projects withh which you will be involved. An agenda for that meeting is attached.

Please call me sometime after August 16th to let me know if you will be able to attend that meeting and I will help you with travel arrangements. We will fund travel, lodging and per diem but the arrangements need to be made through our travel office and there are some limitations. I look forward to meeting you on September 11th.

Sincerely,

Stephen E. Sharpe  
Commander, U.S. Coast Guard  
Executive Director, Ship Structure Committee

5420/SSC  
September 13, 1993

Mr. Peter a Bysura  
Virginia Tech  
202 Church St.  
Blacksburg, VA 24060

Dear Sir:

Thank you very much for your submission for the position of Student Member in the Ship Structure Committee. Your application was well received but unfortunately was not the one selected. The new student member of the SSC is Mr. Jason E. Miller of Massachusetts Institute of Technology.

We wish you best of luck in completion of your undergraduate studies. Should you continue on studying ship structures at the graduate level you may wish to apply for our annual \$20,000 Student Grant.

Sincerely,

Stephen E. Sharpe  
Commander, U.S. Coast Guard  
Executive Director, Ship Structure Committee

June 15, 1995

MEMORANDUM

SSC STUDENT MEMBER SUMMARY REPORT

From: Trevor Butler, Student Member, SSC

To: Chairman, SSC

Via: Executive Director, SSC

1. For starters, I am truly sorry for not being able to deliver this report in person, however, I'm sure it is good hands. My time as student member has been a very rewarding experience and has confirmed the focus of my future endeavours in the naval architectural field. In this report, I will attempt to summarize my involvement with the SSC, impressions obtained and any recommendations I have for further student members.

2. Since becoming the student member in November, 1993, I have attended several meetings covering all aspects of SSC business. The following is a list of these meetings:

a. November, 1993 - SSC Annual Meeting, ABS World Headquarters, New York, NY.

b. May, 1994 - SSSC Field Trip and Priorities Meeting, Defence Research Establishment- Atlantic (DREA), Halifax, NS, Canada.

c. June, 1994 - SSSC Spring Meeting, United States Coast Guard Headquarters, Washington, D.C.

d. February, 1995 - SR-1368 - Design Guide for Composites in Marine Applications, Kick-off Meeting with Eric Greene Associates Ltd., Washington, D.C.

e. March, 1995 - SR-1372 - Evaluation of Marine Structures Education in North America, Kick-off Meeting with Prof. Ray Yagle, National Academy of Sciences, Washington, D.C.

f. May, 1995 - SR-1344/5 - Project Technical Committee Meeting with Alaa Mansour, Paul Wirsching and Gregory White, Marine Safety Office, San Diego, CA.

g. May, 1995 - SSSC Field Trip and Priorities Meeting, San Diego, CA.

3. As noted in the above list, I have been involved in several projects. These are elaborated on as follows:



a. SR-1368 - Design Guide for Composites in Marine Applications. I participated in reviewing technical proposals for this project and presenting my feelings on their relative merits. The kick-off meeting was a success as there was a good discussion within the group concerning the direction of the project. I felt this left a clear impression with Eric Greene Associates on how to proceed with this effort.

b. SR-1372 - Evaluation of Marine Structures Education in North America. There was no proposal review for this project as it was identified at the Priorities meeting as a "must-do" project. The kick-off meeting was also a success and I believe Prof. Yagle will provide a true picture of the present state of structures education and recommendations for the future. As I am a product of the present system, I am keenly interested in the results of this project. I also felt that my involvement was more of an obligation, but an obligation I was more than willing to fulfil.

c. SR-1374 - Damage Tolerance Analysis of Marine Structures. My involvement in this project was curtailed by a student's worst nightmare - Final Exams! However, I did briefly review the proposals and, though they were all from vastly different backgrounds, the selection of the winning proposal must have been tough.

d. SR-1344/5 - Reliability-Based Ship Design. I was not a member of the PTC for these projects, but I attended the San Diego meeting because of my interest in this topic. My Masters thesis will be in this area.

4. In general, my impressions of the SSC are that it is an organization performing essential research in the development of ship structures on a "shoe-string" budget. Due to the diligent work of the Committee on Marine Structures, the research done is readily applicable to industry and the betterment of the ship structure as a whole. I hope the other agencies involved follow the USCG lead and increase their respective contribution levels in coming years as more worthy research projects may then be completed. In short, keep up the excellent work and the result will be a safer, more reliable ship that will have been built quicker, and cheaper, than ever before.

5. The only recommendation I can give is that the next student member become involved in at least one PTC that is already ongoing as soon as possible so that he or she may see a project

to completion. Once involved in an existing committee, become involved in a new project. This way, all aspects of PTC activity can be experienced.

6. In closing, I would like to thank everyone for their help, encouragement and assistance throughout, especially Cdr. Sharpe for straightening out those damned travel claims! Seriously though, I will never forget this experience and I'm sure some, if not all, of us will meet again soon.

Regards,

Trevor Butler  
B.Eng (Naval Architecture)  
Memorial University of Newfoundland, 1995.